

Claims

1. A method of making a biodegradable foamed body, in which a polymer mixture comprising a biodegradable
5 polymer and water is introduced into a mould, the mould being defined between moulding surfaces of two opposed parts that mate together, wherein each mould part is of electrically conducting material and each of the moulding surfaces is coated with a layer of an electrically
10 insulating material, and wherein radio-frequency signals are applied between the mould parts so that the polymer mixture is heated by dielectric heating, such that the water turns to steam, so the polymer mixture forms a foam, fills the mould and sets in no more than 15 s.
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2. A method as claimed in claim 1 wherein the radio-frequency signals are applied such that the polymer mixture forms a foam, fills the mould and sets in less than 10 s.
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3. A method as claimed in claim 1 or claim 2 wherein the radio-frequency signals are applied at a frequency between 20 MHz and 50 MHz.
- 25 4. A method as claimed in claim 3 wherein the polymer mixture is at least in part starch-based.
5. A method as claimed in any one of the preceding claims wherein the pressure in the mould rises to above
30 10 atmospheres during the foaming process.
6. An apparatus for making a foamed body from a polymer mixture, the apparatus including a mould defined between moulding surfaces of two opposed parts that mate
35 together, wherein each mould part is of electrically conducting material and is coated with a layer of an

electrically insulating material, and means to apply radio-frequency signals between the mould parts so that polymer mixture between the mould parts is heated by dielectric heating.

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7. An apparatus as claimed in claim 6 wherein the electrically insulating material used to coat the moulding surfaces is one that is not dielectrically heated.

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8. An apparatus as claimed in claim 6 or claim 7 wherein, when the mould parts are together, they are held apart by an electrical insulator that is thicker than the gap defining the mould.

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